

1. (Twice amended) A process for the production of lower aliphatic esters which comprises reacting a lower olefin with a saturated lower aliphatic mono-carboxylic acid in the vapour phase in the presence of a heteropolyacid catalyst, wherein a) the reaction is carried out in a plurality of reactors set up in series, and b) the feedstock has no more than 0.1 ppm of metallic or metal compound impurities prior to being brought into contact with the heteropolyacid catalyst.